Idaho's Forest and Woodland Resources

(Ed. note: Much of the following discussion on Idaho's forests, timber growth and other characteristics has been excerpted from "Idaho's Forests, 1991", by Forest Service researchers Mark Brown and David Chojnacky. This is the survey of Idaho's forests, completed for every state on a recurring cycle. Idaho's most recent survey was done in 1991. While this makes this data a bit dated, it is the best available. The Forest Service is in the process of revising Idaho's forest survey.)

With a wide variety of topography and climate, Idaho's forests are predictably ecologically diverse. Climatic patterns, aspect and elevation govern the occurrence and distribution of forest types in Idaho, and natural events such as catastrophic fire and severe weather, as well as human-induced logging and grazing, have influenced the succession and development of forest areas. In general, based upon the level of available moisture, "forests" as perhaps most people think of them occupy the northern two-thirds of the state.

The Snake River plains, and the high desert of southern Idaho, are for the most part non-forested with commercial tree species. However, portions of these lands include species that, while perhaps not commercially valuable, are very important for wildlife habitat and scenic values. These include such tree species as aspen, pinion pines or junipers, as well as scattered stands of Douglas-fir, lodgepole or subalpine fir in the higher elevations and on the moister sites. For the purposes of the Forest Legacy Assessment of Need, the State Forest Stewardship Committee has chosen to include in the program those lands with the vegetative types illustrated in Figure 1.

Idaho's timberlands can be classified by "forest types". Forest type classifications are determined by species composition and are convenient descriptors of forest areas. Some types represent largely pure stands of a single species. More often, however, types are composed of several species and named for one representing a plurality of the stocking.

According to the forest survey, the Douglas-fir type covers the largest area of Idaho's timberland with 6.1 million acres, or 35 percent. Second is lodgepole pine with 2.5 million acres, or 14 percent. Next in abundance is true spruce-fir, a combination of Englemann spruce and Subalpine fir, with 2.4 million acres. Grand fir accounts for 2.2 million acres and Ponderosa pine type with 1.5 million acres. Except for the timberland shifted into reserve status over the past four decades, the area of timberland in Idaho has changed relatively little. However, changes in land management, past timber harvest practices and fire management have all altered the forest type composition of Idaho. For example, high-value species such as white pine and Ponderosa pine are highly sought after and logging has greatly reduced the area they once occupied. In addition, white pine blister rust and outbreaks of mountain pine beetle have taken their toll on pine species as well, reducing their presence in the forest. (Idaho's Forest Inventory, 1991)

Figure 1. forest and Woodland Types
Eligible for the Legacy Program

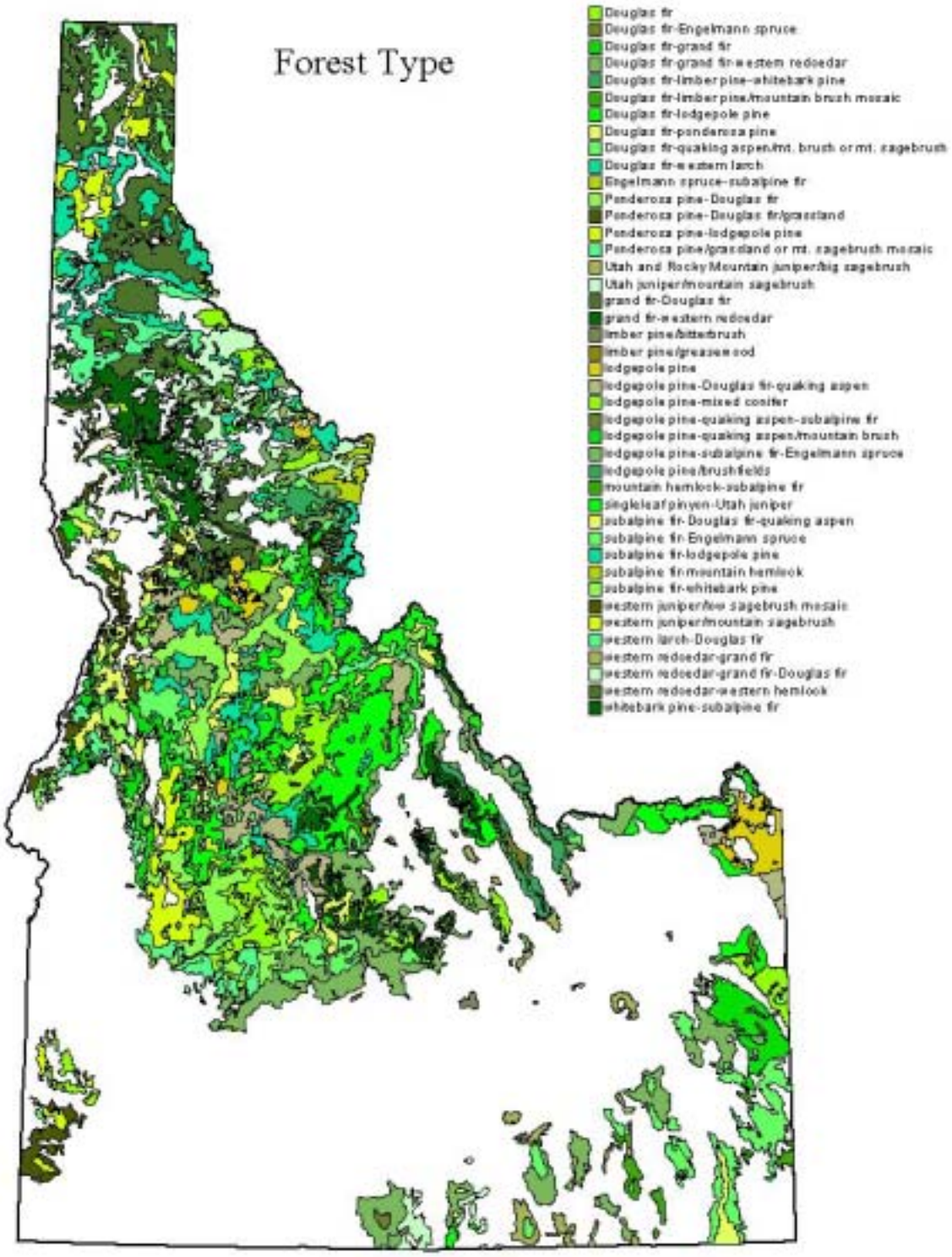


Figure 2. Area of Non-Reserved Timberlands by Forest Type and Ownership, 1991

Source: USDA, Forest Service

Timber Productivity

While "productivity" is a rather subjective term, for timber, the product is generally measured as the potential timber yield capability of the forest, generally measured in cubic feet per acre per year. Based on timber growth, in Idaho there are more than 3 million acres of highly productive timberlands, those producing at least 120 cubic feet per acre per year. More than half of these are national forest lands. Idaho timberlands, especially those in northern part of the state, are among the most productive in the nation. Only five southern states and three western states (California, Oregon and Washington) have more acres of high productivity lands than does Idaho.

Table 1. Idaho Timberland Area by Productivity Class and Ownership, 1991

	Ownership group				
	National forest	Other public	Forest industry	Other private	All ownerships
Productivity class (cu.ft./acre/year)	*1,000 acres*				
225+	8.9	0	7.1	0	16.0
165-224	227.4	78.5	83.6	97.0	486.5
120-164	1,535.0	298.8	280.6	416.2	2,530.6
85-119	3,230.0	538.0	555.3	655.6	4,978.9
50-84	4,065.0	394.5	291.8	674.1	5,425.4
20-49	3,395.8	213.9	20.9	162.7	3,793.3
0-19	346.4	13.4	0.0	22.7	382.5

Source: Brown and Chojnacky (1996).

The age of trees is a key characteristic of forests. The issue of "old growth " and "ancient forests" imply a relationship to forest age. However, usually it is the increased size of trees and structure of the forests resulting from age that contributes to "old growth values", as opposed to age, per se. Large trees and complex structure are important habitat attributes for some wildlife species. Age may also play an important part in the psychological and cultural significance people attach to forests. From a timber growing prospective, age is important because older trees grow more slowly and become more susceptible to mortality from disease and insects, so the risks of retaining timber generally increases with age, although economic values can, as well.

Almost half of Idaho's timberlands are in the over 80 years age class and another quarter are between 60 and 80 years of age. Age distribution is not even across ownerships. Over half of national forests timberlands are over 80 years old, but only 36% of forest industry lands and 25% of other private lands have attained that age. Forest industry has a greater percentage (17%) of timberlands in the 1-10 year old age stands than the other ownership categories, reflecting differing management objectives, including that of harvesting old, slower growing stands and replacing them with young trees that will grow rapidly.

Table 2. Idaho Timberland Area by Age Class, 1991

Age class	Ownership group				All ownerships
	National forest	Other public	Forest industry	Other private	
years	*1,000 acres*				
1-10	929.8	131.5	226.5	123.2	1,411.0
21-30	272.5	50.5	38.4	66.8	428.2
31-40	324.2	59.8	76.0	106.2	566.1
41-50	802.8	86.6	70.4	246.0	1,205.8
51-60	1,124.2	174.1	111.5	207.0	1,616.8
61-70	1,198.8	179.8	153.0	393.3	1,925.0
71-80	1,474.5	192.9	148.0	308.9	2,124.3
more than 80	6,335.3	671.6	459.9	486.9	7,953.7
Total	12,462.1	1,546.7	1,283.7	1,938.3	17,230.9

Source: Forest Inventory and Analysis (1997).

Numerous factors including tree species and site conditions determine how fast and large trees may grow. From a wood products perspective, the diameter of trees is important because harvesting and manufacturing costs and potential end-use products and values all vary by the size of trees being removed from the forest. Larger trees result in lower harvesting costs per unit of wood and produce more valuable products. Large trees also provide habitat for some kinds of wildlife and contribute to the beauty of the forest.

On all Idaho timberlands, 62% of trees are 1-5 inches in diameter-at-breast-height; only 4 percent are 15 inches or greater. Few differences exist in the percentages of number of trees in each diameter class by ownership.

Like age class, diameter class does not tell us much about how trees are arranged in the forest. Is a particular forest made up only of one size tree or a variety of sizes? Although not a precise measure, stand-size class is an expression of the size of trees within a particular forest tract. On Idaho timberlands, 70% of the acres are in the sawtimber stand size class, with each ownership having from 59% to 72% in acres of sawtimber. Other size classes are less evenly distributed. The forest industry has a lower percentage of nonstocked acreage, a large percentage in seeding and sapling, and much less in poletimber than the other ownerships.

Table 3. Number of Live Trees on Idaho's Timberland By Diameter Class, 1991

Diameter class	Ownership group				All ownerships
	National forest	Other public	Forest industry	Other private	
inches at breast height	*million trees*				
1.0-4.9	2,941.2	379.1	464.1	396.0	4,180.5
5.0-8.9	1,091.1	113.0	98.7	152.3	1,455.2
9.0-14.9	594.7	65.7	55.7	79.2	795.4
15.0-20.9	154.7	20.4	14.4	18.8	208.3
21.0-28.9	53.7	6.2	3.7	4.2	67.7
29.0 and over	15.7	1.7	0.5	0.5	18.4
All	4,851.2	586.0	637.2	651.0	6,725.4

Source: Forest Inventory and Analysis (1997).

Table 4. Idaho Timberland Area by Stand-size, 1991

Stand-size class	Ownership group				All ownerships
	National forest	Other public	Forest industry	Other private	
	1,000 acres				
Sawtimber	9,300.0	1,046.8	788.8	1,200.3	12,335.9
Poletimber	1,732.7	171.1	70.1	304.6	2,278.5
Sapling &seedling	1,019.3	212.2	338.1	331.5	1,901.1
Nonstocked	756.5	107.0	42.4	191.9	1,097.8

Source: Brown and Chojnacky (1996).

Wildlife Values

Perhaps the biggest challenge in describing Idaho's wildlife values is deciding where to begin. For the sportsmen, trophy bull elk, game birds of many species, deer or waterfowl come to mind. These animals not only add excitement for all who travel to Idaho's woodlands, they significantly add to the state's economy through tourism revenues. However, just as significant are those animals that present few hunting opportunities, including moose, numerous songbirds, hares, various reptiles and vertebrate species too numerous to mention, but all deserving of their place in Idaho's forest and woodlands. Finally, Idaho is the home of 23 plant and animal species that are so rare they are listed as "threatened" or "endangered" under the federal Endangered Species Act, as well as 6 candidates for such listings *(Appendix III)*. These include such grand creatures as wolves, grizzly bears and woodland caribou.

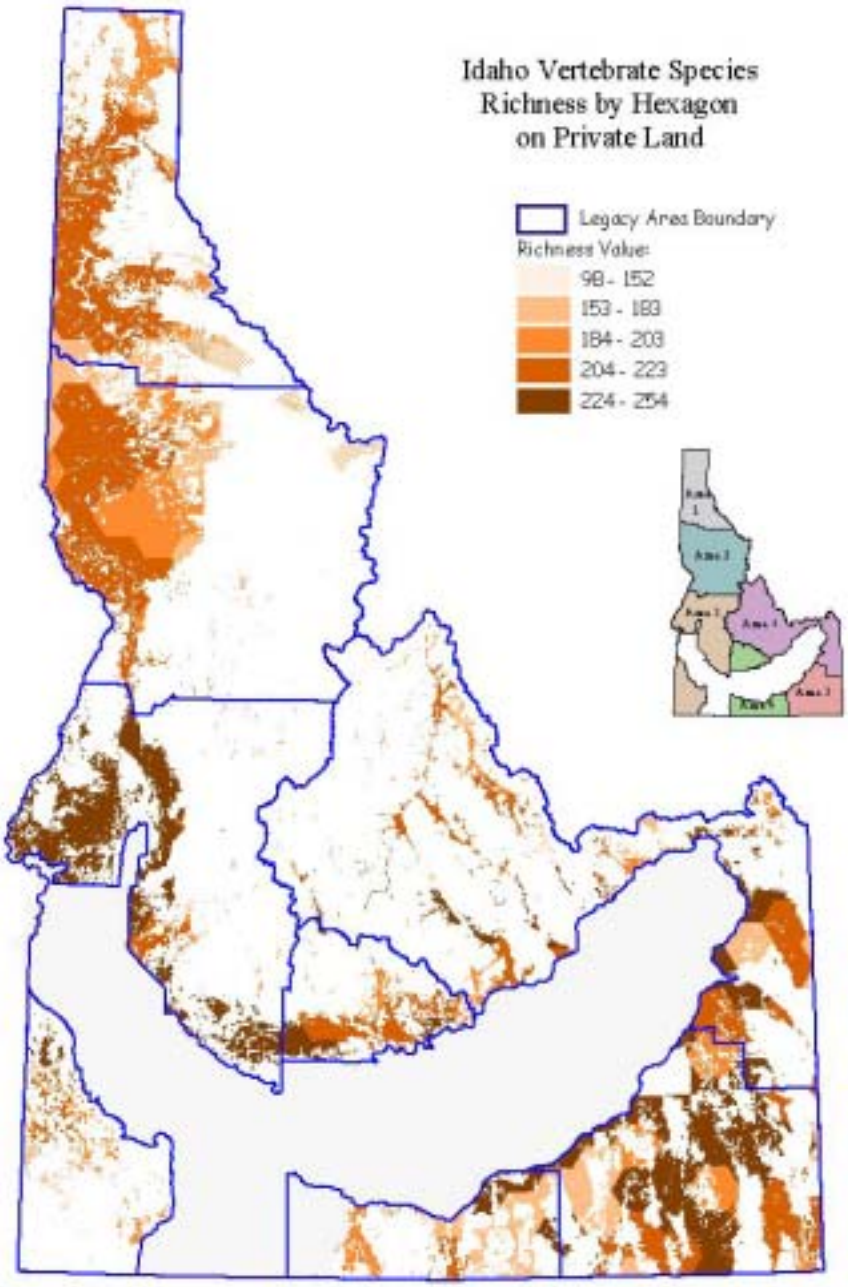
There is probably little point in attempting a definitive discussion of all the species of wildlife associated with Idaho's privately owned forests and woodlands and the values they represent for the purposes of this Assessment. Any such effort beyond noting the number of species and that they each have a value and a place would inevitably fall short. In lieu of that attempt, the committee notes, however, the recent work of the Idaho Cooperative Fish and Wildlife Research Unit's "Landscape Dynamics Lab" in Moscow. Scientists there have completed some work that allows an easy, yet comprehensive, look at the relationship between wildlife species and land ownership.

Through the Idaho "Gap Analysis Project", scientists modeled vegetation cover and wildlife habitat for 317 vertebrate species native to Idaho to calculate "species richness" for given areas of land across the state. The result is "Geographical Information System" (GIS) data for the state that displays the number of species projected to be found in any area. As such, this data represents a measure of biological diversity across Idaho's landscapes and can be combined with other data to illustrate species richness across various landscapes, including privately owned forestlands. The results of this work are summarized in Figure 4 and in Appendix III for each Legacy Area.

One aspect of the impact of private land ownership and how these lands are used on wildlife bears special mention, for it highlights a critical objective of the Forest Legacy Program in Idaho. Throughout Idaho, one of major values to be protected and carefully managed is big game winter range. According to the Idaho Department of Fish and Game, big game winter range is the variable in wildlife management that is in the shortest supply, at the greatest risk and has the greatest impact on wildlife numbers. Winter range is generally the lands between the lowland agricultural areas and the upland timbered areas that are often in public ownership.

Often the most valuable areas from a wildlife standpoint are on south-facing slopes and have either scattered trees or "stringers" of timber in the draws. These lands are frequently in private ownership, but, as noted previously, they are in short supply. Such characteristics that make these sites important big game winter range also make them attractive to recreational or residential developments. However, the combination of fences, roads, dogs, shrubbery and people associated with development make wildlife conflicts inevitable, and, invariably negative for the animals.

Figure 3. Species Richness on Private Lands in Idaho



Geology and Minerals

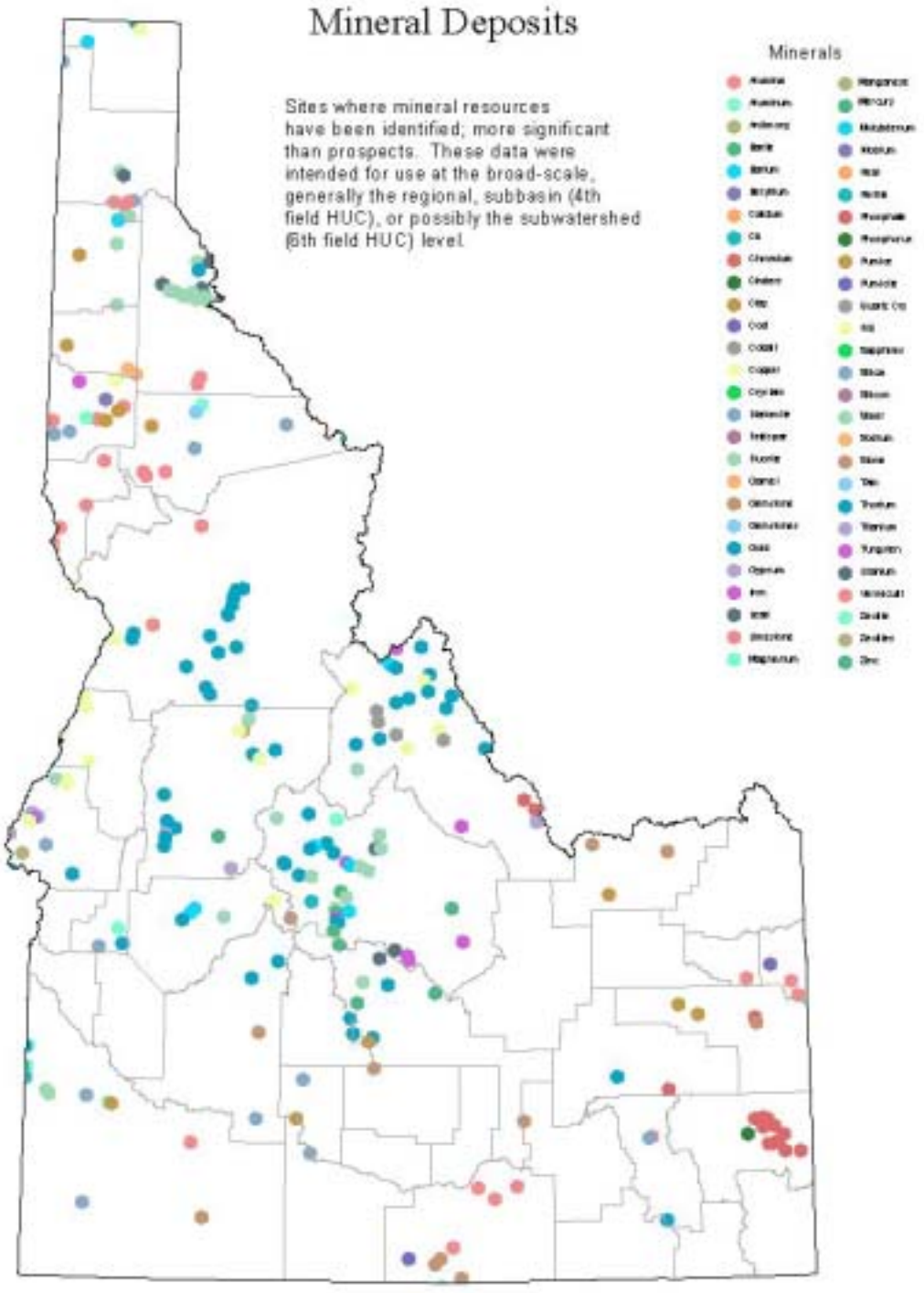
In the fall of 1860, a prospecting party led by Captain E. D. Pierce discovered gold in Canal Gulch, a stream located near the present city of Pierce in Clearwater County. A major migration immediately began which spawned the settlement at Lewiston. The migration continued to spread southward to create more settlements at Boise and in the central and southwestern part of the state. Later in 1881 a new gold discovery made by Andrew Prichard along the North Fork of the Coeur d'Alene River, resulted in the development of the Silver Valley of north Idaho. Thus, mining became the state's first industry and the early development of the state and the settlement of most of its communities were the result of the Pierce discovery.

Idaho provides the nation with the widest array of minerals of any state, including gold in central and southern Idaho, silver in the north and southwest, lead and zinc in the north, molybdenum in central Idaho and phosphate in southeast Idaho. Much of these mineral resources either has been or is being mined. While mining generally takes place in remote locations, its impact is felt throughout the state. Idaho's mining industry directly employs 5000 with an annual payroll of over $200 million. While "hard rock" mining in particular (gold, silver, lead, zinc) has declined in recent years, mining and mineral production continue to play an important role in Idaho's modern economy (Table 5).

Table 5. Idaho Mineral Production (Millions of Dollars)

	1992	**1993**	**1994**	**1995**	**1996**	**Total**
Phosphate	$547	$568	$630	$569	$577	$2,891
Gold	35	41	39	115	135	365
Molybdenum	29	0	45	80	48	202
Silver	32	26	23	31	40	152
Lead, Zinc, Copper	18	16	12	14	19	79
Other	112	127	131	283	63	716
Total	**$773**	**$778**	**$880**	**$1,092**	**$882**	**$4,405**

Figure 4. Known Mineral Deposits in Idaho



Watersheds and Fish

Like wildlife, the value and variety of Idaho's watersheds defy a simple and concise description. The state is blessed with close to 100,000 miles of rivers and streams, as well as over 2,000 major natural lakes. Each supports hundreds of native aquatic species, ranging from small and very rare invertebrate species to Chinook salmon. It is probably the salmonid family that captures the most attention in the state—all species that require cold and clean water. Originally, most of the state's major watersheds served as spawning and rearing areas for anadromous species—salmon and steelhead trout—that spent a part of their life cycle in the Pacific Ocean. Other streams, where access to the ocean was cut off by barrier falls, held various native trout species, most notably cutthroat, rainbow and bull trout.

Despite a century and a half of civilization and the construction of numerous dams on the rivers leading to the sea, Idaho remains the home of salmon and steelhead, both of which can be seen spawning in streams tributary to the Salmon or Clearwater Rivers just as they have for eons. Both species can be caught, as well, and thousands come to the state each year for that purpose, in addition to those who fish for cutthroat, rainbow or introduced valuable game fish species throughout the state's waters.

Perhaps the most comprehensive discussion of Idaho's watersheds and the fish that inhabit them is found in the Interior Columbia Basin Ecosystem Management Plan draft Environmental Impact Statement. In assessing the condition of watersheds in the Columbia Basin for that effort, the federal scientists completing the study had four objectives: (1) broadly characterize the geophysical and biological settings that define the natural ability of each watershed to support aquatic life, (2) identify the factors that affect aquatic habitats, (3) complete an assessment of current conditions for each watershed, and, (4) synthesize each of the above into a regional context from which managers could develop strategies for managing the regions watersheds *(ICBEMP EIS supporting documents)*. Their findings are summarized in Figure 6 and in the following descriptions of the watersheds depicted on the map *(Note: The following descriptions and map do not include the Bear River/Bear Lake watershed, since it is not tributary to the Columbia River and therefore not included in the Interior Columbia Basin Ecosystem Management Plan).*

Assemblage A-These watersheds are found primarily in the Northern Glaciated Mountains, the Lower Clark Fork and Upper Clark Fork, outside the range of anadromous fishes. The watersheds generally contain a high number of fish species, many of them non-native. Species composition consistently includes fish with a wide range of temperature tolerances, suggesting a mix of larger rivers and reservoirs with smaller, cold-water streams.

Assemblage B-These watersheds are found primarily in the Columbia Plateau, Blue Mountains, and Northern Glaciated Mountains, within the range of anadromous fish. The watersheds display the highest taxa diversity and evenness and generally contain many species-many of which are non-native. Dominant species include anadromous steelhead and Chinook salmon, several warm-water game fish, and carp, suggesting that these are larger rivers, and perhaps migration corridors for anadromous fish.

Assemblage C -These watersheds are scattered throughout the Basin, but are most common in the Columbia Plateau, Northern Glaciated Mountains, and the Owyhee Uplands generally outside the range of anadromous fish. The watersheds include the highest total taxa and show high taxa diversity, yet have only one dominant species (introduced rainbow trout) and relatively few dominant groups. In addition, these watersheds are one of only two groups where the mean number of non-natives exceeds the mean number of natives. The presence of bullheads and sunfish, and the relative absence of native trout suggest warmer rivers.

Assemblage D-These watersheds are most common in Blue Mountains and the Central Idaho Mountains, and contain both steelhead and Chinook salmon. The watersheds exhibit high diversity with high numbers of native species and relatively few non-natives. The species' composition suggests a mix of high-quality, cold-water streams and cool-water rivers.

Assemblage E-These watersheds are found mainly in the Columbia Plateau and Blue Mountains, and contain steelhead but lack Chinook salmon. The watersheds tend to have moderate numbers of species, with very few nonnatives. The species' composition suggests a mix of high-quality, cold- and cool-water habitats.

Assemblage F-These watersheds are most common in the Northern Cascades and the Central Idaho Mountains, within the overlapping ranges of westslope cutthroat trout, steelhead, Chinook salmon, and bull trout. The watersheds include predominately native species, mostly salmonids and sculpins that are typical of coldwater habitats, with relatively low diversity.

Assemblage G-These watersheds are scattered through the Northern Cascades, Southern Cascades, Columbia Plateau, Blue Mountains, and Central Idaho Mountains. The watersheds include the fewest total species and highest percentage of nonnatives among the cooler-water assemblages that contain steelhead. Redband trout and steelhead are the only dominant species.

Assemblage H-These watersheds are found primarily in the Northern Glaciated Mountains, the Lower Clark Fork, and the Upper Clark Fork, outside the range of anadromous fish. They are distinguished by the presence of longnose suckers. They exhibit moderate numbers of species, predominately natives, though introduced rainbow and brook trout are common. The species mix and spatial distribution suggest mid- to higher elevation, cold- and cool-water streams.

Assemblage I-These watersheds are found in the Upper Snake and Snake Headwaters, within the range of Yellowstone cutthroat trout. The watersheds contain moderate numbers of species, mostly natives, but a relatively high ratio of nonnatives for the given species mix.

Assemblage J-These watersheds are scattered throughout the Basin, excluded only from the Southern Cascades and Upper Klamath. The watersheds exhibit moderate numbers of species and diversity, with a fair number of introduced fishes. Dominant species include redside shiners, mountain whitefish, and introduced rainbow trout, suggesting cool-water rivers or transitional areas.

Assemblage K-These watersheds are found most commonly in the Owyhee Upland, and scattered throughout the rest of the Basin. The watersheds exhibit high variability in species counts that are lower than average. Numbers of non-natives are low, but occasionally exceed native counts. Assemblage K is distinguished from Assemblage J by lack of mountain whitefish.

Assemblage L-These watersheds are found in the Southern Cascades, Upper Klamath, Northern Great Basin, and Columbia Plateau. The two dominant species are non-native bullhead and introduced rainbow trout. Non-native species often outnumber native species. Despite this apparent contradiction, the watersheds are very high in native species diversity and native ratio, suggesting a relatively diverse native fauna and fewer, but widespread non-native species.

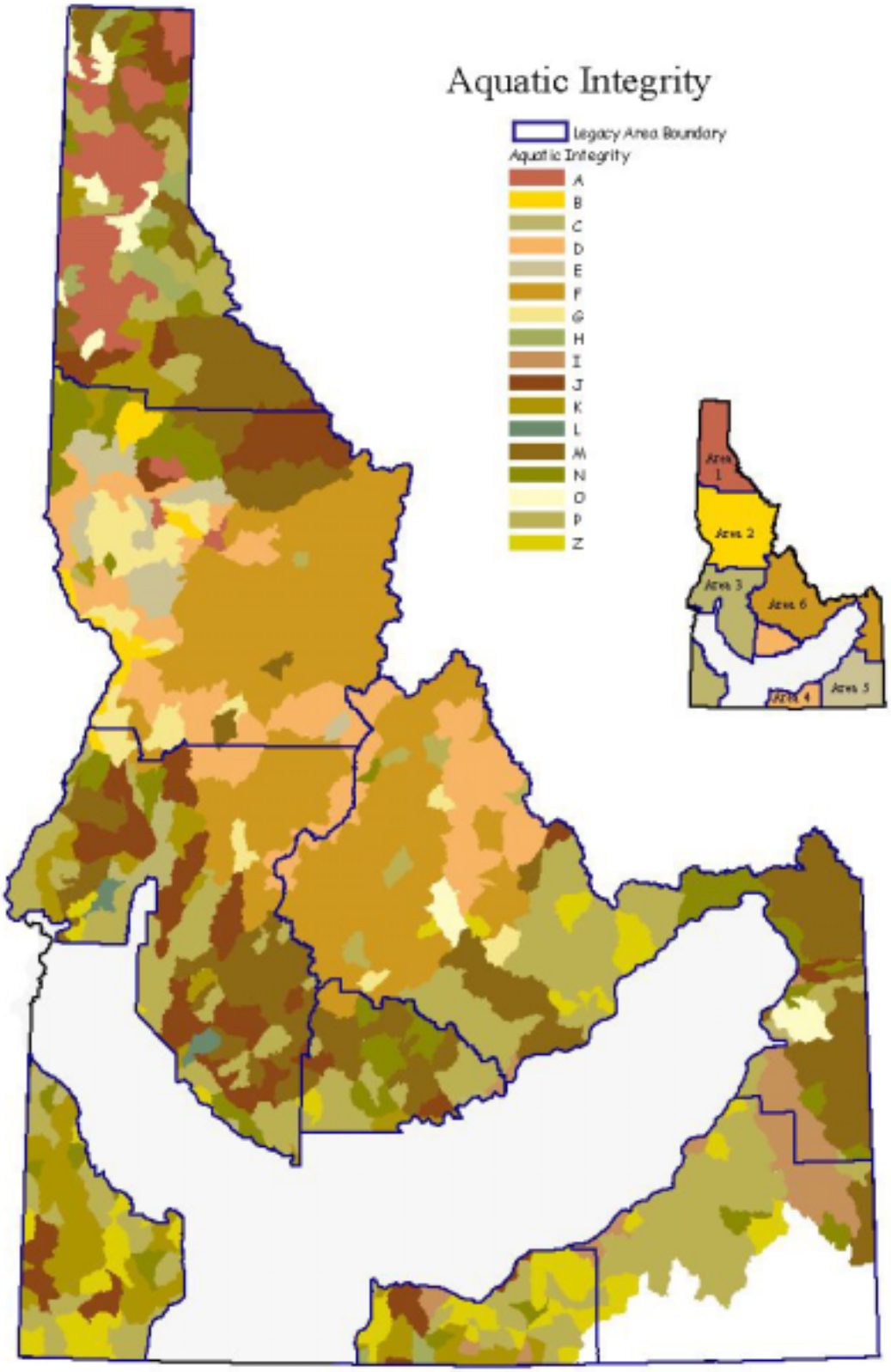
Assemblage M- These watersheds are found mainly in the Northern Glaciated Mountains, the Snake Headwaters, and the Central Idaho Mountains, but are scattered throughout other ERUS. The watersheds have low species counts, low diversity, and widespread non-natives. Mountain whitefish is the only dominant species, and is generally found in combination with trout and sculpins.

Assemblage N-These watersheds are scattered throughout the Basin, most commonly in the Columbia Plateau, and are excluded only from the Upper Clark Fork. Collectively, the watersheds contain a high total number of species, most of which occur only rarely. Mean counts and diversity are low. Trout and dace are the dominant groups, suggesting smaller, cold-water streams.

Assemblage O-These watersheds are scattered throughout the Basin and have very few species, averaging less than three per watershed. Given the distribution of this assemblage, it probably reflects areas that were incompletely sampled.

Assemblage P-The most abundant and wide spread of all assemblages, other than unclassified, these are areas where introduced rainbow trout are known present but, in general, few other species were reported. Reported non-native species generally outnumber native species, though the ratio of abundant natives to abundant taxa is high. Low evenness suggests unequal distribution of species.

Figure 5. Watershed Descriptions and Aquatic Species



Recreation and Tourism

The travel and recreation industry has emerged as a major component of the Idaho economy. The industry is comprised primarily of business firms and organizations that provide services and sell retail goods, such as lodging establishments, restaurants, recreational facilities and transportation services. The money that visitors spend on these goods and services while in Idaho creates employment for residents of the state. Travel spending also generates tax revenues for local and state governments, consisting primarily of sales and use taxes levied on the purchases of goods and services by the traveler. The state government also collects taxes on motor fuel, personal income of the employees, and the corporate income of businesses. The scenic beauty and recreational opportunities of Idaho's forests rate high among the primary attractions underlying the growth and stability of the travel and recreation industry on the state.

According to the Dean Runyan Associates study conducted for the Idaho Department of Commerce in 1997, visitors spent approximately $1.7 billion in Idaho in 1997. Spending on recreation and overnight travel directly supported over 24,000 jobs with a payroll of more than $274 million and generated over $134 million in local and state tax revenues.

Table 6. Summary of the Economic Effects of Travel in Idaho

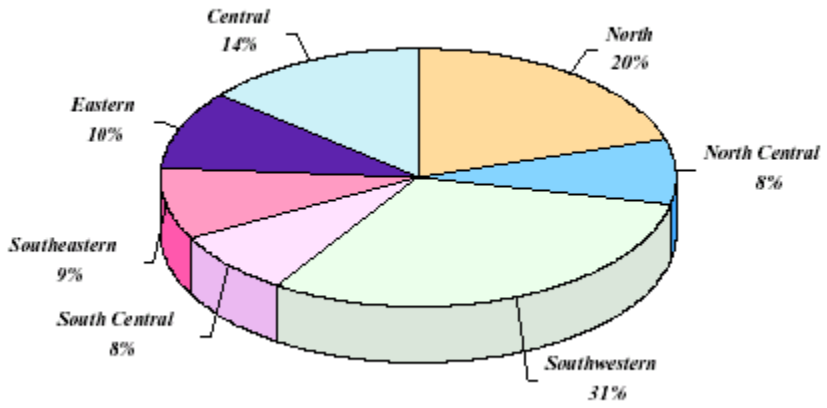
Travel Impacts at a Glance
1997

Travel Generated Spending ($000)	
Destination Spending	1,651,267
Air Transportation within Idaho	43,090
Total Spending	1,694,357
Travel Generated Payroll ($000)	274,140
Travel Generated Employment (Jobs)	24,309
Travel Generated Tax Receipts ($000)	
Local Taxes	3,979
State Taxes	130,497
Total Tax Receipts	134,476
Travel Spending per Resident ($)	1,425

Source: Dean Runyan Associates, 1997

A better understanding of the impact of recreation and travel on different areas of the Idaho can be gained by reviewing the 1997 Runyan study. The following provides estimates of travel impacts for seven regions within Idaho. The regional breakout indicates that while travel and recreation spending is significant statewide, the nature of the industry varies by region throughout the state.

Figure 6. Travel and Recreational Spending by Region of Idaho



Region	Counties
(1) North	Benewah, Bonner, Boundary, Kootenai, Shoshone
(2) North Central	Clearwater, Idaho, Latah, Lewis, Nez Perce
(3) Southwestern	Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, Washington
(4) South Central	Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls
(5) Southeastern	Bannock, Bear Lake, Bingham, Caribou, Franklin, Oneida, Power
(6) Eastern	Bonneville, Clark, Fremont, Jefferson, Madison, Teton
(7) Central	Blaine, Butte, Camas, Custer, Lemhi

A further break down of the estimates has been made by county, as illustrated in Table 7, which shows estimates of total spending, employment, payroll and tax receipts for all of the Idaho counties. For rural counties and those with significant amounts of forestland, much of the recreation is termed as “dispersed”, including such activities as camping, hunting, hiking, fishing or other types of recreation not necessarily associated with concentrations of people (golf courses or beaches, for example). Given this, the relative use of land areas for dispersed recreation as depicted in Figure 8 and described for each Forest Legacy Area in Appendix III is also a useful indicator of recreation values. This data was prepared as part of the Interior Columbia Basin Ecosystem Management Plan.

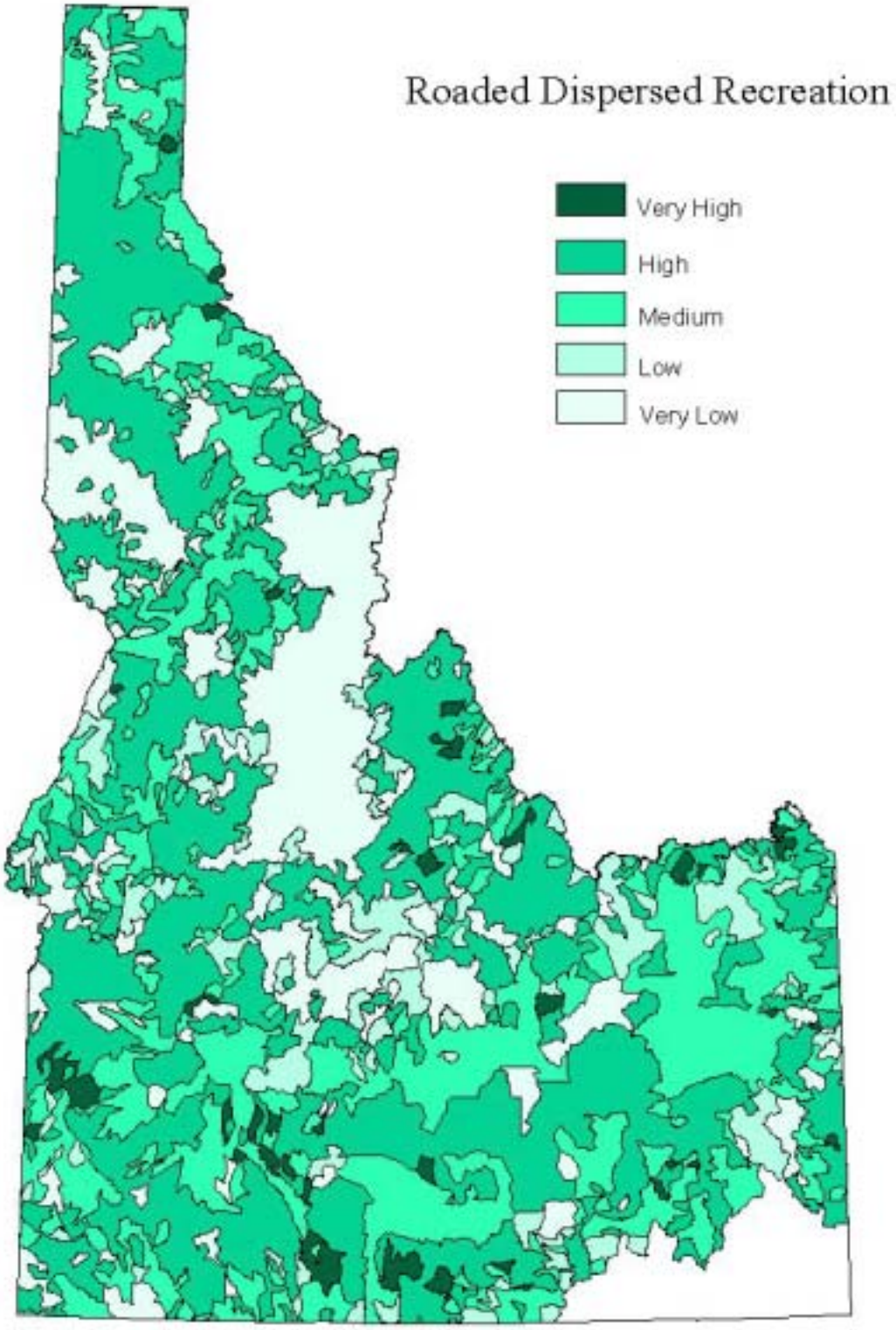
Table 7. Travel Spending by County, 1997

Travel Spending by County, 1997
($ 000)

Ada	323,696	Gem	8,311
Adams	6,028	Gooding	10,492
Bannock	80,951	Idaho	47,338
Bear Lake	12,056	Jefferson	6,441
Benewah	7,876	Jerome	9,679
Bingham	19,138	Kootenai	203,280
Blaine	150,781	Latah	41,192
Boise	14,201	Lemhi	21,589
Bonner	92,658	Lewis	4,044
Bonneville	87,875	Lincoln	3,392
Boundary	17,978	Madison	16,837
Butte	3,539	Minidoka	9,182
Camas	5,319	Nez Perce	33,436
Canyon	61,065	Oneida	2,848
Caribou	8,256	Owyhee	8,630
Cassia	27,228	Payette	7,942
Clark	3,933	Power	18,814
Cleanwater	12,620	Shoshone	20,249
Custer	55,800	Teton	10,363
Elmore	32,571	Twin Falls	75,432
Franklin	10,470	Valley	51,896
Fremont	40,738	Washington	8,193

Source: Dean Runyan Associates, 1997

Figure 7. Dispersed Recreational Use in Roaded Areas

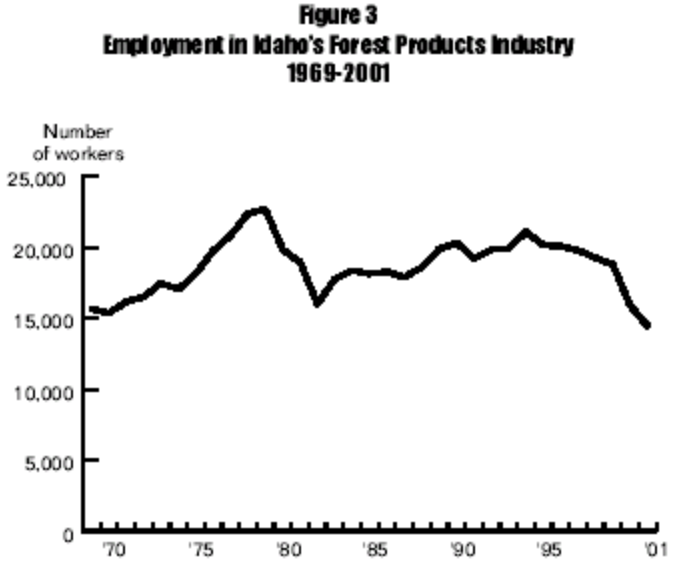


Forest Products

The principle economic values of Idaho's forestland have traditionally been derived from the forest products industry and thus, for this section the assessment of economic values will come from timber related parameters. Other values, such as recreation, fish and wildlife, minerals, and watersheds are discussed in previous sections. The state's forestland, particularly it's private land, has been historically been managed for the production of timber that can be manufactured into a host of forest products. For purposes of this assessment timber harvest, the resulting mill employment and wood products production represent the principle values to be considered.

In 2001, the estimated total sales value of Idaho's primary wood and paper products was $1.3 billion, down about 11 percent from approximately $1.45 billion in the previous year. Estimated forest industry employment was 14,460, a decrease of about 1400 workers from 2000. This number also includes approximately 2,000 people employed in the pulp and paper industry. Other sections of this Assessment refer to "lumber employment" and this should be interpreted as those working in the lumber and plywood industry and does not include pulp and paper workers.

Figure 8. Employment in Idaho's Forest Products Industry



Source: Bureau of Economic Analysis, U.S. Department of Commerce; Bureau of Business and Economic Research, The University of Montana-Missoula; Idaho Department of Labor.

Idaho's estimated lumber production was less than 1.8 billion board feet in 2001, down 7 percent from 1.9 billion board feet in 2000. Due to closures and curtailments, plywood production decreased 20 percent from 2000 levels. Weak paperboard markets lead to curtailments of production in November at Potlatch Corporation's Lewiston paper mill.

In mid-2001, Boise Cascade Corporation permanently closed its Idaho lumber and plywood operations due to uncertainty in national forest timber offerings. For South Idaho, the closure of the Emmett and Cascade mills will have a substantial impacts on local economies and demand for saw timber. The lack of competition for public timber sales from the closure of these mills is estimated to have reduced timber values by approximately $100 per thousand board feet *(Northwest Natural Resource Group, 2001)*.

There are near term, more positive factors for the forest products industry resulting from recent declines in the cost of energy and mortgage interest rates. Unfortunately, improvements in the markets for wood products will do little to help those communities that no longer have sawmills. Investment in new manufacturing facilities and the resulting jobs that might be created will be almost certainly be limited by the availability of timber in the near term.

Figure 9. Historical Sources of Timber in Idaho

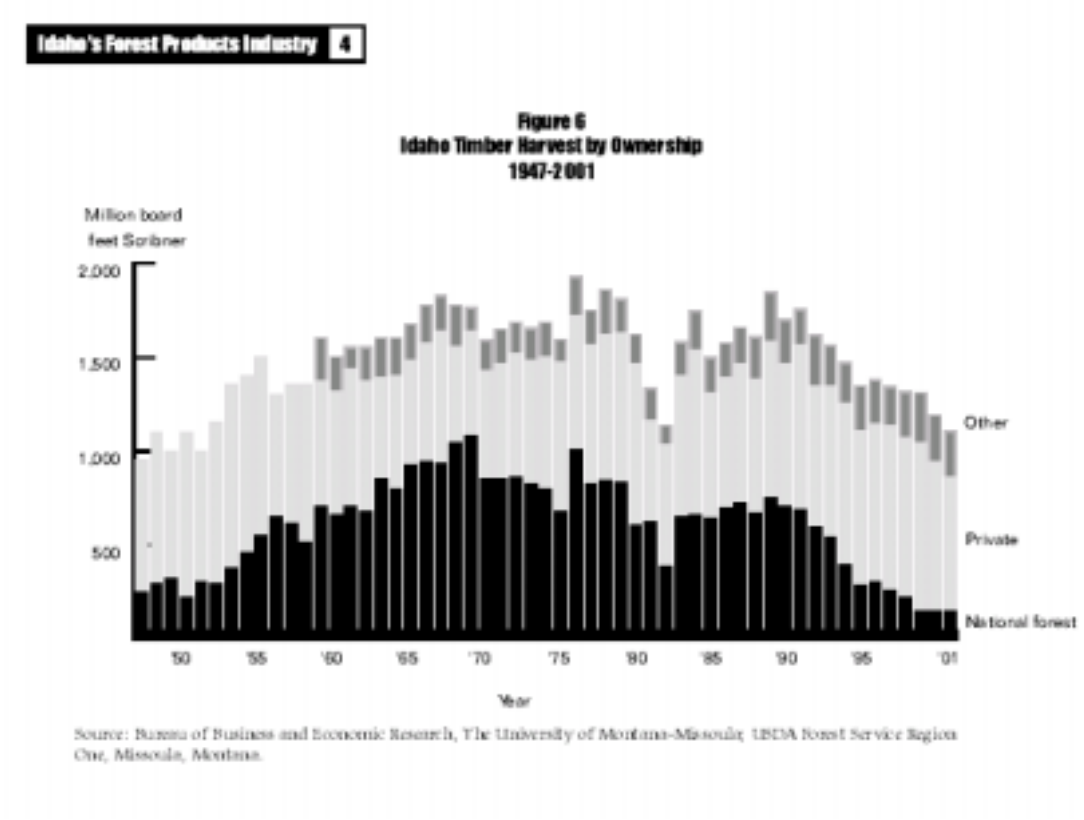


Figure 10. Mill Towns and Timber Dependent Areas in Idaho